

ABSTRACT

Provided is a switching power supply unit which uses a multilayer board or a stack of planar conductors as the windings of transformers so as to reduce the volume of the transformers and to have high efficiency, small size and small noise. The switching power supply unit is formed by connecting a plurality of capacitors (23), (24), (25) and (26) connected in series with each other to input terminals (22a) and (22b) of a plurality of switching power supplies having switching elements (27), (28), (29) and (30), transformers (31) and (32), and rectifiers (33), (34), (37) and (38). The switching power supply unit inputs the voltages of capacitors (23)-(26), and outputs the respective voltages developed by the plurality of switching power supplies together to common output terminals (40a) and (40b). The transformers (31) and (32) are each composed of windings made up of a stack of planar conductor coils. This structure can reduce noise transmission through the windings, thereby providing stable output characteristics.